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 TI Paclitaxel-induced apoptosis in Jurkat, a leukemic T cell line, is enhanced by **ceramide**
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 DT Journal
 LA English
 CC 1-4 (Pharmacology)
 AB We hypothesized that the lipid second messenger, **ceramide**, and microtubule-directed chemotherapeutic agents might engage converging pathways in inducing apoptosis. Our studies demonstrated that simultaneous treatment of Jurkat cells with paclitaxel and **ceramide** enhanced paclitaxel-induced cell growth inhibition. Cell cycle anal. indicated a significant increase in the hypodiploid population over that obsd. with paclitaxel treatment alone. Morphol. evaluation and a TUNEL assay confirmed a dramatic increase in apoptosis in Jurkat cells treated with the combination of these two agents. This is the first demonstration that paclitaxel and **ceramide** interact in a supra-additive manner to decrease leukemic T-cell growth, suggesting a possible application of paclitaxel and **ceramide** in combination therapy.
 ST paclitaxel **ceramide** interaction Tcell leukemia apoptosis
 IT Antitumor agents
 (T-cell leukemia; paclitaxel-induced apoptosis in Jurkat, a leukemic T cell line, is enhanced by **ceramide**)
 IT Apoptosis
 Drug interactions
 (paclitaxel-induced apoptosis in Jurkat, a leukemic T cell line, is enhanced by **ceramide**)
 IT **Ceramides**
 RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (paclitaxel-induced apoptosis in Jurkat, a leukemic T cell line, is enhanced by **ceramide**)
 IT 33069-62-4, Paclitaxel
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (paclitaxel-induced apoptosis in Jurkat, a leukemic T cell line, is enhanced by **ceramide**)
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